METHOD AND APPARATUS FOR MEASURING FLOW RATE THROUGH AND POLISHING A WORKPIECE ORIFICE

ABSTRACT OF THE DISCLOSURE

A method and apparatus for comparing the flow rate through an orifice within a master part with the orifice within a workpiece by subjecting each orifice to an identical fluid at an identical temperature, under an identical pressure, and comparing the downstream pressures of the fluid exiting these orifices. For purely measurement purposes, the fluid may be a non-abrasive media, however, in the event the workpiece orifice must be machined, it is possible to introduce a flowable abrasive media, and pass this media through the orifices until the desired pressure difference is achieved. With additional flow characteristics of the master part, it is also possible to calculate the flow rate through the workpiece orifice using only the pressure differential at the exits of the workpiece and the master part.

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